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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,970	12/20/2001	Karl Hansen	24,954-25	9112

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EXAMINER	
AMIRI, NAHID	
ART UNIT	**PAPER NUMBER**
3679	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/033,970	HANSEN, KARL	
	Examiner	Art Unit	
	Nahid Amiri	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *18 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,6,10,11,13,14 and 20-31* is/are pending in the application.

4a) Of the above claim(s) *20-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,6,10,11,13,14 and 25-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 March 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

In view of Applicant's Amendment received 11 April 2006, amendments to the claims have been entered. Claims 2, 5, 7-9, 12, and 15-19 are canceled. Claims 1, 3, 4, 6, 10, 11, 13, 14, and 20-31 are pending.

Claims 20-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8 December 2003.

Drawings

The drawings are objected to because **numerous reference numerals have been used to identify all variations of the same name part. A planar element "12" is different variation in all of Figs. 1, 2, and 14-20; and slots "18" and "19" are different variations in Fig. 12.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 27-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27, line 8, it is unclear what applicant meant by having "a direction of slot elongation" since no slot has been claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 6, 10, 11, 13, 14, and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,474,920 B2 Lin.

With respect to claims 1 and 3, Lin discloses an apparatus for coupling (Figs. 1, 2 and 7) comprising a first generally planar member (5) having a pair of generally opposed surfaces and an circular opening (54) therebetween disposed at an engaging region; the slot (54) defined by a pair of opposite walls; a coupling member (4) having an external thread set and having a portion (58) for contacting the opposite walls of the slot (54) with contact between the portion (58) and the circular opening (54) aperture occurring across a substantial length of the slot (54) whereby said planar member (5) and coupling member (4) are locked in position relative to each other when said portion (58) is inserted into the slot (54) of the planar member (5); and a non-planar

member (7) having an internal thread set adapted to engage the external thread set of the coupling member (4) thereby connecting the non-planar member to the first planar member (5), wherein portions of the pair of generally opposed surfaces of the planar member extend into the thread set of the non-planar member. Lin does not disclose that the slot has an oblong shape; and wherein the slot (54) is formed in a region adjacent an edge portion of the first planar member and wherein the opposite walls of the circular opening are generally parallel and in contact with and in contact with generally parallel walls of the longed portion of the coupling member. Oblong shaped slots are known to provide adjustability to enable accommodation of tolerances when aligning holes on adjacent members. Therefore, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the slot of Lin as an oblong shape in order to enable quick assembly and accommodation of manufacturing tolerances.

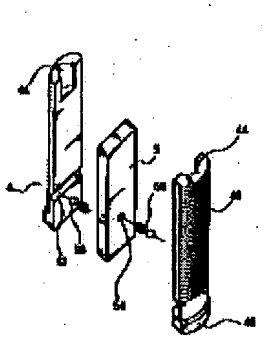

FIG. 2

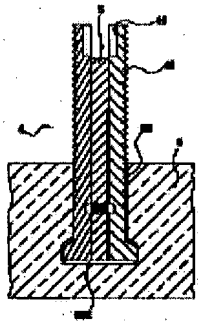

FIG. 3

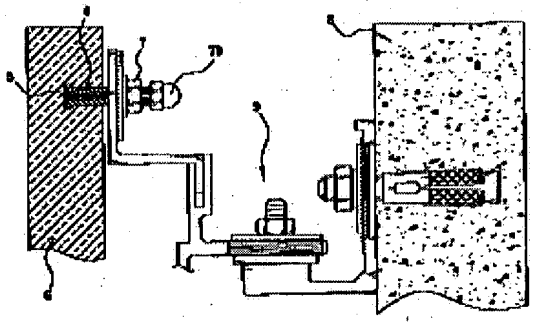

FIG. 7

With respect to claim 4, Lin discloses the claimed invention except for the planar member having more than one slot. However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to consider that, the duplicating the components has been consistently held that mere duplication of the essential working parts of device involves only routine skill in the art. *St. Regis Paper Co. V. Bemis Co., 193 USPQ 8.* Accordingly, it would have been an obvious duplication of parts to one of ordinary skill in the art to provide Lin with more than one slot so as to enable adjustable assembly and provide for a duplicative effect.

With respect to claim 6, Lin discloses (Figs. 1, 2 and 7) that the coupling member has a larger diameter dimension than a thickness dimension of the first planar member.

With respect to claim 10, Lin discloses an apparatus for connecting two members together (Figs. 1, 2 and 7) comprising a first member (5) having a pair of generally opposed major surfaces and defining an engaging region, and a slot (54) disposed at said engaging region, the slot (54) defining a pair of generally parallel planar walls; an elongate threaded coupling member (4) having an external thread set and an engaging portion (58) for engaging the slot of the first member (5), said threaded coupling member removably engaging the slot (54); and the coupling member (4) having a pair of generally parallel planar walls engaging the walls of the first member (5) when the engaging portion is inserted into the first member (5), with contact between the walls of the first member (5) and walls of the coupling member (4) occurring along a length of the slot (54) thereby preventing rotation of the first member (5) relative to the coupling member (4) about an axis generally perpendicular to a direction of the slot (54); and a second member (7) having an internal thread set sized to cooperate with the external thread set of the threaded coupling member, wherein said external thread set of the threaded coupling member is threadedly received within the internal thread set, wherein portions of the first member extend into the internal thread set of the second member. Lin does not disclose that the slot has an oblong shape. Oblong shaped slots are known to provide adjustability to enable accommodation of tolerances when aligning holes on adjacent members. Therefore, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the slot of Lin as an oblong shape in order to enable quick assembly and accommodation of manufacturing tolerances.

With respect to claim 11, Lin discloses (Figs. 1-3) that the elongate threaded coupling member (4) is two longitudinal portions of a threaded shank each having a threaded exterior surface and a substantially flat interior surface.

With respect to claim 13, Lin discloses (Figs. 1, 2 and 7) wherein the thickness of the first member is less than a diameter of the internal thread set.

With respect to claim 14, Lin discloses an apparatus for joining two members via a threaded coupling member (Figs. 1, 2 and 7), the apparatus comprising a first member (5) having an slot (54) disposed proximate an edge; an elongate threaded coupling member having an external thread set (40) and an engaging portion (58) corresponding to the slot (54) of the first

member (5), the slot (54) preventing rotation of the first member relative to the coupling member about an axis generally perpendicular to a direction of the slot (54) when the portion (58) of the coupling member (4) is inserted into the slot (54); and a second member (7) having an internal thread set sized to cooperate with the external thread set of the threaded coupling member, said internal thread set operatively receiving a portion of both the external thread set of the threaded coupling member and a portion of the first member to secularly bind the first member to the second member. Lin does not disclose that the slot has an oblong shape. Oblong shaped slots are known to provide adjustability to enable accommodation of tolerances when aligning holes on adjacent members. Therefore, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the slot of Lin as an oblong shape in order to enable quick assembly and accommodation of manufacturing tolerances.

With respect to claim 25, Lin discloses (Figs. 1-3) that the elongate threaded coupling member (4) is two longitudinal portions of a threaded shank each having an threaded exterior surface and a substantially flat interior surface.

With respect to claim 26, Lin discloses (Figs. 1-3) that the thickness of the first member is less than a diameter of the internal thread set.

With respect to claim 27, Lin discloses an apparatus (Figs. 2-3 and 7) for joining two members (5 and 7) via a threaded coupling member (4) the apparatus comprising a first member (5) having a circular aperture (54) disposed proximate an edge; an elongate threaded coupling member (4) having an external thread set (40) and a spherical engaging portion (58), the engaging portion (58) being non-cylindrical and contacting the aperture (54) of the first member (5) at multiple points along the aperture (54) and preventing rotation of the first member (5) relative to the coupling member (4) at least along an axis generally perpendicular to a direction of the aperture (54) when the engaging portion (58) is inserted into the aperture (54) of the first member (5), and a second member (7) having an internal thread set sized to cooperate with the external thread set (40) of the threaded coupling member (4), said internal thread set operatively receiving a portion of both the external thread set (40) of the threaded coupling member (4) and a portion of the first member (5) to secularly bind the first member (5) to the second member (7).

With respect to claims 1, 3, 4, 6, 10, 11, 13, 14, 25, and 26 of applicants' argument filed on 2 October 2006, that Lin (US 6,474,920 B2) does not disclose an elongate threaded coupling member as presently claimed

Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, e.g. claim 1, lines 3-4; the limitation of "**said oblong slot defined by a pair of opposite walls**" and lines 5-6, "**a non-spherical elongated portion for contacting the opposite walls of the oblong slot**"; claim 10, lines 8-12, the engaging portion is inserted into said first member with "**contact**" between the walls of the first member and walls of the coupling member "**occurring along a length of the slot thereby**" preventing portion of the first member relative to the coupling member "**about an axis generally perpendicular to a direction of elongation of the oblong slot**"; and claim 14, lines 5-7, said slot preventing rotation of the first member relative to said coupling member "**about axis generally perpendicular to the slot**" when said portion of the coupling member is inserted into said slot;

was not claimed in original claimed invention. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NA

Nahid Amiri
Examiner
Art Unit 3679
July 18, 2007

Daniel P Stodola

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